

Claims.

1. A fiber-optic diaphragm sensor comprising a diaphragm, a housing
affixed to the diaphragm, a ferrule bonded to the housing with a bonding
compound and an optical fiber within the ferrule, the optical fiber having a tip
5 spaced from the diaphragm,
the improvement comprising a selection of fiber material,
diaphragm material, housing material, ferrule material and bonding compound
material having at least some differing thermal expansion coefficients
thereamong the materials whereby the optical fiber tip to diaphragm distance
10 changes to compensate for any temperature change induced changes in sensor
sensitivity and offset dependence.
2. The fiber-optic diaphragm sensor of claim 1 wherein the housing
and ferrule are bonded together adjacent the fiber tip.
3. The fiber-optic diaphragm sensor of claim 1 wherein the housing
15 and ferrule are bonded together at a base on the housing, the base being remote
from the diaphragm.
4. The fiber-optic diaphragm sensor of claim 1 wherein the fiber tip
to diaphragm distance change is substantially zero over varying temperature
changes.